

Anchorage Amateur Radio Club

Next Meeting FEBRUARY 5th 2010, 7:00 PM



FEBRUARY 2010 Meeting:
ALMR: Alaska Land Mobile Radio System. Del Smith is the executive director of the ALMR program of which AARC on behalf of ARES is an approved user. Come learn about how this system is being used to support INTEROPERABILITY between user groups and state agencies.

Microphones, Pre-Amps & Impedance

By: Rob Jones

Every microphone inevitably has an output impedance. And correspondingly every microphone preamplifier has an input impedance. These characteristics simply describe the “resistance” to signal current flow out of the microphone circuitry and into the preamplifier. The microphone impedance is usually made quite low to allow a reasonable current to flow and the amplifier impedance is made large enough for that current to develop a reasonable voltage across its input.

In a simple and ideal world that might be the end of the matter but, as most users are aware, in actual practice the input impedance of a microphone pre-amplifier can have a great effect on the sound of the recorded signal. More accurately, the (often quite complex) impedance of a mic-pre will interact in a unique way with the output impedance of an individual design of microphone.

Whether you view this as a nuisance or an asset depends on your requirements and taste, but this interaction explains why certain combinations of microphone and mic-pre have become revered within sections of the industry, rather than the mics or pre-amps alone. The Neumann U87 and Focusrite Red 7 or ISA series are a classic example (Figure 1).



Frequency response and level

The main reason why impedance has such an effect is the significant impact it has on the frequency response and output level of the microphone. The complete circuit needs to be considered and a key factor is the mic-pre input impedance in relation to that of the microphone. The absolute value of either is less important than their ratio to each other. Typical figures vary considerably but some microphones have a nominal value as low as 30Ω, many are around 150-200Ω and figures as high as 600Ω can be met.

Microphones with low output impedances are able to drive long microphone lines with fewer losses and less variation in frequency response. Ones with higher output impedance may develop a greater voltage output but are likely to show more variability in response.



Figure 1

A pre-amp with a relatively low impedance “sees” a lower voltage level from the mic and is also likely to emphasize its frequency-related variations, resonances and dips. However a relatively high impedance yields a greater overall level and, often, a flatter frequency response. It may also alter extreme HF and transient response to give an increase in perceived clarity and brightness. Dynamic microphones, without any form of buffering, are particularly sensitive to the impedance that they see and may produce very erratic frequency responses with pre-amp impedances dramatically different from that which the designer had in mind. This is because the circuit impedances have a direct effect on the damping of the voice coil.



Microphones, Pre-Amps & Impeadance (cont.)

Matching microphone and pre-amp impedances to the same value (power-matching) reduces both the level and the S/N ratio by 6dB and is not a technique that is used for those reasons. For dynamic and condenser microphones, the preferred preamp input impedance is generally about ten times that of the microphone output; normally around 1.2k Ω or 2k Ω . This figure is partly chosen because of inherent noise considerations and also for additional factors such as the effect of phantom power resistors. However there are a number of circuit configurations that can, to some extent, isolate these factors from the actual input impedance so the situation is more complicated than it might appear.

Ribbon microphones may require more careful preamp selection since their fundamental output impedance is very low indeed ($\sim 0.1\Omega$), as is their voltage output. In order to bring this voltage up to a more practical level a transformer is used which also raises the output impedance. For those microphones that have a nominal output impedance of 30-120 Ω a pre-amp impedance of as low as 600 Ω is likely to be a good choice; for nominal output impedances of 120-200 Ω a 1.4k Ω design is probably a better starting point.

Transformers

Transformers are rather complex in their AC behavior, having capacitance, inductance and resistance and this leads to an impedance that will vary with frequency. The characteristics are extremely dependent on the transformer design and the circuit that it is part of but transformer output microphones will often have a performance that changes significantly across the audio spectrum. In the same way transformer-input pre-amps, as most early “classic” designs were, tend to have fairly low nominal input impedances that vary with frequency and even amplifier gain.

The use of transformer inputs, particularly, will result in a subtle coloration of the signal and this will be specific for any given microphone and the amplifier gain setting. Electronic inputs, on the other hand, mostly have a higher input impedance which remains substantially constant with frequency. This type of input, which is relatively inexpensive and has been fitted to multi-channel analogue desks of recent years, can be extremely linear and accurate but often produces a sound that is judged to be somewhat dull and lifeless. If “character” is what you are looking for then it may well not satisfy.

External mic preamplifiers

External mic-preamps designs have burgeoned to resolve this problem and the use of valve (tube) amplifiers and transformer inputs has (re) gained considerable vogue precisely because of the “warmth” they bring to recordings. This is not due to any innate perfection but to the fact that such circuit components allow a small level of desirable harmonic distortion, primarily 2nd-, 3rd- and 5th-order, to be applied to the signal. This is partly due to transfer characteristics but also a result of the amplifier impedance response.

While the output impedance characteristic of a microphone is fixed in manufacture the input parameters of a microphone preamp do not have to be. A feature on some newer pre-amps (e.g. Focusrite ISA 428 and 430 MKII — figure 2) is a variable input impedance, which allows the level of transformer and microphone interaction to be adjusted. It is therefore possible to create a variety of mic/mic-pre ‘colours’. It is also possible to add additional reactive components that intentionally alter the transformer’s impedance at HF. An inductor across the transformer secondary – an “air” circuit – can produce an attractive shimmer and top-end boost to the output.

“Impedance” is only of interest in the context of a complete circuit, and “matching impedance” as far as microphones and preamplifiers goes is a widely misunderstood term. Most microphones can be used very satisfactorily with most preamplifiers and true “matching” is actually undesirable. However if you are seeking a particular quality, tone, colouration, character – the terms are not fixed – then picking the right combination of equipment can be very helpful. Using the interaction of a specific microphone’s output impedance with a specific preamplifier’s input impedance to create some subtle changes in the overall response may well produce exactly what you are listening out for. □



Special Event Stations

SPECIAL EVENT STATIONS:

Special Event Station N7I

WL7MY and KL7JR will be operating special event station "N7I" from Honolulu (Oahu Island HI-008S) **Feb. 4-10, 2010** in celebration of the 16th anniversary of the US Islands Awards program.

Main frequency: 28.460 or 14.260. Equipment: TS-50 and vertical on mag mount. QSL mgr KL7JR.

For additional info: www.usislands.org



The badge comes with your Name and Callsign engraved, the club logo on an arch 3 inch dome as well as the option of purchasing individual name plates for each position you have served for AARC. If you are interested in purchasing an AARC badge, the costs is \$20.00 per member for each badge and \$2.00 per customized name plate. Badges have the option of a pin or magnet attachment.

For more information about this project or to order your badge today in time for the convention and outdoor public activities, please contact Michael O'Keefe, KL7MD at 907-351-4038 or via email at:

mok@gci.net.

When ordering, please indicate your name, Callsign and if you wish to have any additional name plates added. Orders take approximately 10 days for printing and our made locally in Anchorage.



Club Coats

For those of you interested in purchasing a new coat, the current prices are:

Small, Medium, Large and XL: \$110.00

2X: \$120

3X: \$130

There is also a \$25.00 embroidery fee and \$7.00 to get your name and call sign on the coat. The club has agreed to pay for the embroidery fees.

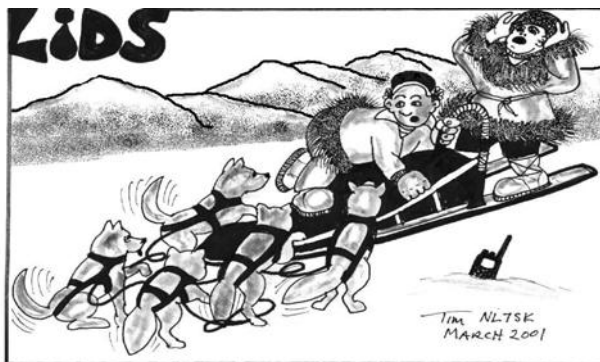
This is a great price for a coat than can be used during summer amateur activities or as a winter coat. You must have a current club membership.

If you are interested in ordering a club coat, a sign up sheet will be available at the club meeting or send your name, phone number, email address and payment to Lee Ann Wells, KL7LW. Lee Ann can be reached at: 350-3480. If you have questions feel free to contact Lee Ann at KL7LW@yahoo.com



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LIDS Cartoons are the creation of NL7SK, Tim Comfort and are available for purchase on CD for only \$15. All sale proceeds go to support the Matanuska Amateur Radio Association.
www.kl7jfu.com



BOB BALOO LEARNED THE HARD WAY: NEVER MAN A DOG RACE CHECK POINT WITH A BALONEY SANDWICH IN YOUR POCKET!

SCHOLARSHIPS

FAR Scholarship information and an application may be requested by letter or QSL card sent to:

THE FOUNDATION FOR AMATEUR RADIO, INC.
MR. DAVE PRESTEL-W8AJR
FAR SCHOLARSHIP CHAIRMAN
P O BOX 911
COLUMBIA, MD 21044-0911

DEADLINE FOR OBTAINING INFORMATION:
MARCH 31st, 2010



**AARC General Membership Meeting
APU Campus/ Carr-Gottstein Building
December 4th 2009 7pm**

Vice President Heather Hasper opened the meeting at 702 pm with introductions.

The rest of the business portion was given over to a discussion of the new 2010 budget the board brought forward for the membership to vote on.

Our Treasurer, Calex KL2BT explained how the budget we were approving was 40% of normal, due to a decline in revenue. Due to this, major cutbacks in capital projects had to be made. Certain expenses such as rent are fixed and cannot be lowered. Calex then did a category by category description of each expense and why it had to change in the new budget.

Mike O'Keefe KL7MD, then gave an explanation of the gaming system and how gaming revenues are affected by increased operating costs and robbery recovery expenses.

Mark Kelliher KL7TQ moved the budget be approved with Bruce McCormick KL7BM seconding. The vote was unanimous.

The membership voted to not have a membership meeting in January due to it being New Year's Day.

The rest of the meeting was given over to eating and the Chinese Auction activity.



WEBSITE UPDATES

A lot of updates have been made to the KL7AA website over the last several months.

- We have added several new pages including a History of AARC describing the first meeting of the AARC in 1947 as well as photos of our membership in 1961.
- In an effort to recognize our Silent Key members, we have created a Silent Key page with links to a dedicated page for each member. Many of these do not have photos at this time, but as we get them scanned we are uploading them to the website so that we can recognize our club history.
- We are working on a photo gallery with images of special events and our club activities over the years.

➤ PAST NEWSLETTERS:

After long winter nights of scanning documents, we have uploaded all 40 years of our club newsletters that we currently have in our archive collection. These can be found on the website by selecting Newsletter and then past newsletters. These are divided up by decade and include past membership rosters.

If you have any photos, [OLD QSL CARDS](#) or see any corrections please feel free to email our club historian kl7sp@arrrl.net to submit your comments and photos.

Thanks to NL7NN, NL7DK and KL2LO for all their help in scanning and archiving our club history.

KL7AA Board Meeting Minutes~ DECEMBER 2009

AARC Board of Directors

Monthly Meeting

Hope Community Resources Building

Tuesday December 15th 2009

Members Present: Heather Hasper KL7SP Vice President, Paul Spatzek WL7BF Secretary, Tom Rutigliano NL7TZ 1 Year board member ,Sean Jensen KL2CO 1 Year board member , John Orella KL7LL 1 Year board member , Hugh McLaughlin KL7HM 1 year board member ,TJ Sheffield KL7TS 1 year board member , Mike O'Keefe KL7MD 3 year board member , Kathleen O' Keefe KL7KO Past President

Non voting members present: Keith Clark KL7MM Trustee, Fred Erickson KL7FE Membership Chairman.

Members Excused:Randy Vallee KL7Z President, Bruce McCormick KL7BM 3 year board member ,Dave Koch KL2OS 1 year Board Member , Susan Woods NL7NN 1 Year board member. Jim Wiley KL7CC VEC Chairman, Pat Wilke WL7JA Activities Chairman

Members Absent and Unexcused: None

The meeting was called to order by Vice president Heather Hasper at 7pm after determining that a quorum did exist.

Reports:

Secretary:Minutes for Board Meeting of November 17th and general meeting of December 4th were approved as submitted Motion made by Keith KL7MM and seconded by Mike KL7MD.

There was no treasurer's report, since Calix was out on business travel.

There was no formal VE report since Jim Wiley was absent. A short report on the successful Cordova VE session with all applicants passing, but the Skype application left a lot to be desired.

Trustee: Nothing much to report, Keith is still working on the document describing how the club station fits together, but is going to be away for the Christmas holidays, so he expects to pick it up when he returns from his holiday travel.

Membership: Fred reports 363 members at time of this report of which 113 will expire at the end of December.

Activities: No report since Pat was not present. General membership voted no January club meeting, due to it being scheduled for Jan 1 the New Years Day Holiday. February will be an ALMR presentation

Old Business:

Equipment Use policy: General discussion was held on the use of the CCV and other equipment especially regarding drivers approval for the CCV holding a commercial license. Other discussion was held regarding our expensive equipment and being approved for same.

Finance Committee: Needs to meet. Heather gave a history lesson on Richard Block's involvement in the early stages of the committee and the work he did getting us on QuickBooks and everything back in order.

Bylaws Committee: Plan is to meet late January or early February.

Remote Testing report:

There were several issues with Skype and synchronization. We lost contact several times but did not lose total contact . The VE's were happy and did not have serious concerns over the test security. Heather did explain the various systems that universities use that are able to do remote testing. Various questions came up regarding proctoring and test security.

New Business:

Program for February Meeting: ALMR

Adjournment: Moved by John Orella KL7LL, seconded by Sean KL2CO



AMATEUR RADIO




February 2010

**ARES DISTRICT 7 & 5
KL7AA & KL7JFU**

**Anchorage Amateur Radio Club
PO BOX 101987
Anchorage, AK 99510-1987
www.KL7AA.net**



ARES NET: Thursday Nights 8:00 PM 147.27+ PL:103.5

SUN	mon	TUE	wed	THU	FRI	SAT
	1	2 VE Testing	3	4  	5 <i>AARC General Meeting 7PM</i>	6  <i>State ARES Drill</i>
7	8	9	10	11  	12	13 <i>PARKA Meeting 11 AM</i> VE Testing
14 	15	16	17 <i>MARA Board Meeting 7PM</i>	18  	19	20 <i>EARS 3PM</i> 
21	22	23 <i>AARC Board Meeting 6PM*</i>	24	25  	26  <i>MARA Meeting 7PM</i>	27 FUR RONDY
28 FUR RONDY	<i>Parka, meets at Peggy's restaurant, 11AM Contact: Lil Marvin NL7DL, 277-6741 EARS: R1 North, Third Saturday of each month. Contact: Ron Keech: KL7YK@arrl.net</i>					

www.aresalsaska.org

2/26 - 2/28 FUR RONDY Sled Dog Race

*Contact: Heather Hasper, KL7SP
KL7SP@arrl.net*

2/27 - 2/28: Jr. Iditarod

*Contact: Ray Hollenbeck, KL1IL:
KL1IL@arrl.net*



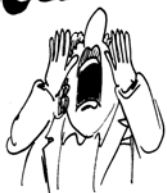
ARES NETS:

**1st Thursday: HT / Portable
2nd Thursday: Mobile Madness
3rd Thursday: RED CROSS
4th Thursday: Emergency Power**



AMATEUR RADIO EMERGENCY SERVICES

Volunteers!



It is that time of year again when we start planning for Sled Dog Races. Time to purchase those 2010 calendars and get them pre marked with all the upcoming 2010 events. Listed below are events that local radio clubs and event coordinators will be looking for communication volunteers to support these upcoming public service events. Your participation is appreciated. All the major events for the year have been updated on the KL7AA website. Be sure to mark your calendars early!.

http://www.kl7aa.net/public_service.htm

Jr. Iditarod, February 27 & 28

Contact: KL1IL, Ray A. Hollenbeck: 373-6771

fuzz@mtaonline.net

Fur Rondy Sled Dog Race February 26, 27 & 28

Contact: **Heather Hasper, KL7SP: 275-7474**
kl7sp@arrrl.net

Ham Operators support Fur Rondy since the 1950's! Here is a photo from 1983.



ARES - Section 7, District 7 (Anchorage, ALASKA)



Mission statement:

Dedicated to amateur radio as it pertains to disaster services. The history of amateur radio operators' involvement in sending life-saving information in and out of disaster areas [and] providing help during and after earthquakes, floods, hurricanes and tornadoes. "HAM's have been there to assist local, state, and federal agencies and relief organizations such as the American Red Cross and Salvation Army." When All Else Fails, Amateur Radio.

Emergency
Management
Institute



FEMA

<http://training.fema.gov/>

The ARRL Certification and Continuing Education Program, was approved by the ARRL Board in January 2000. Volunteers from all over the country assisted in pulling together information for the course. Because the topic of emergency communications is so diversified and so much information is available, the material is broken into three levels: Introductory, Intermediate and Advanced Emergency Communications (Levels I, II and III).

Each on-line course has been developed in segments -- learning units with objectives, informative text, student activities, and quizzes. Courses are interactive and include direct communications with a Mentor/Instructor and other students.

Check out: <http://www.arrrl.org/cc/> for more information.

ARES South Central Alaska District Contact Information

Don Bush, KL7JFT@arrrl.net





Data You Can Use:

Freq	Tone	Call Sign	Features	Area
147.18 (-)	88.5	ADES		Ft. Richardson
146.88 -	no tone	AL7LE	Phone patch	Kenai Soldotna
146.82-	103.5	KB8JXX	IRLP	Anchorage
146.76 -	123.0	KL3K	IRLP	Seward
146.94 -	103.5	KL7AA	Phone patch	Anchorage to Wasilla
224.94 -	no tone	KL7AA	Phone Patch	Anchorage
444.70 +	103.5	KL7AA	Phone Patch	Anchorage
146.67 -	103.5	KL7AIR	MARS Station	Anchorage & Highway North
147.30 +	141.3	KL7ION		Very Wide Area
146.85 -	no tone	KL7JFU	Phone patch	Mat Valley
146.91 -	no tone	KL7JL		Homer
147.15 +	107.2	NL7J	Phone patch	Eagle River & Chugiak
147.33 +	103.5	WL7CVF	Cross linked to 443.900	Very Wide Area **
443.900 +	103.5	WL7CVF	Cross linked to 147.330	Very Wide Area **
147.27 +	103.5	WL7CVG	Cross linked to 443.300	Very Wide Area *
443.300 +	103.5	WL7CVG	Cross linked to 147.27	Very Wide Area*



Any AARC sponsored repeater, with or without an auto-patch, will always be open to all licensed amateur radio operators in the area who are authorized to operate on those frequencies. **IRLP is not authorized on KL7AA repeaters except for special events as approved by the board and trustee.**

2010 Board of Directors

President	Randy Vallee	KL7Z	president at kl7aa.net
Vice President	Heather Hasper	KL7SP	vicepresident at kl7aa.net
Secretary	Paul Spatzek	WL7BF	secretary at kl7aa.net
Treasurer	Calex Gonzalez	KL2BT	treasurer at kl7aa.net
Activities Chairman	TJ Tombleson	KB8JXX	activities at kl7aa.net
Trustee	Keith Clark	KL7MM	trustee at kl7aa.net
Membership Chairman:	Fred Erickson	KL7FE	membership at kl7aa.net
News Letter Editor	Heather Hasper	KL7SP	editor at kl7aa.net
Three Year Board Members			
3rd Year	Eric McIntosh	KL2FM	KL2FM@arrl.net
2nd Year	Bruce McCormick	KL7BM	KL7BM@arrl.net
1st Year	Tom Rutigliano	NL7TZ	NL7TZ@arrl.net
One Year Board Members			
	TJ Sheffield	KL7TS	KL7TS@arrl.net
	Michael O'Keefe	KL7MD	mok@gci.net
	John Orella	KL7LL	kl7ll@arrl.net
	Susan Woods	NL7NN	NL7NN4606@yahoo.com
	Pat Wilke	WL7JA	w7ja@clearwire.net
	Sean Jensen	KL2CO	KL2CO@arrl.net
	Hugh McLaughlin	KL7HM	KL7HM@arrl.net
	Kathleen O'Keefe	KL7KO	kok at woodscross.net

South Central Area Simplex Frequencies

146.52 MHz	Calling and Emergency frequency	
147.57 MHz	National DX Calling / Coordinating frequency	
146.49 MHz	Anchorage area simplex chat	
146.43 MHz	Mat-Su Valley simplex chat	
147.42 MHz	Peninsula simplex chat	
447.57 MHz	DX Calling / Coordinating frequency	
<u>WINLINK</u>	<u>Callsign</u>	<u>Frequency</u>
Anchorage ARES RMS	WL7CVG-10	144.9
Palmer (MATSU) RMS	KL7JFT-10	145.19
FAIRBANKS RMS	KL7EDK-10	147.96
South Central Digipeater	WL7CVG-4	144.9

Nets in Alaska:

VHF

ARES Net: 147.27/87 103.5Hz - Thursdays at 8:00 PM local
No Name Net: 146.85/.25 repeater Sundays 8:00 PM
Big City Simplex Net: 146.520, 446.0, 52.320 FM, 29.6 FM, 28.400 USB With Packet 145.01 and 147.96, Tuesdays 8:00 PM local
Grandson of SSB Net: 144.20 USB Mondays 8:00 PM local
Alaska VHF Up Net: 144.200 USB Saturdays 9:00 AM local
Statewide LINK Net: 145.15(-) PL 123.0Hz; Sundays 8PM local
ALASKA ARES Statewide ARES NET:
 IRLP Alaska Reflector (9070) Thursdays at 830PM Local
Alaska Morning Net: 145.15(-) PL123.0Hz; Daily at 9:00 AM

HF

- ⇒ **Alaska Sniper's Net:** 3.920 MHz 6:00 PM daily
- ⇒ **Alaska Bush Net:** 7.093 MHz 8:00 PM daily
- ⇒ **Alaska Motley Net:** 3.933 MHz 9:00 PM daily
- ⇒ **ACWN (Alaska CW Net)** 3540 kHz 7042 kHz 14050 kHz Non-directed, CW calling and traffic watch For relaying NTS or other written traffic AL7N monitors continuously. Receivers always on WL2K RMS connection available (AL7N@winlink.org)
- ⇒ **Alaska Pacific Net:**
14.292 MHz 8:30 AM M-F
- ⇒ **ERC HF Net:** 3.880 MHz – Sunday 8:30PM

Internet Links, the favorites from our readers:

AARC <http://www.KL7AA.net>
SCRC <http://www.KL7G.org>
EARS <http://www.kl7air.us>
MARA <http://www.kl7jfu.com>
Moose Horn ARC <http://www.moosehornarc.com>
PARKA <http://www.parka-kl7ion.com>
ARES <http://www.aresalaska.org>
Practice Exams : <http://www.AA9PW.com>
Fairbanks AARC: <http://www.kl7kc.com/>
ALASKA MARS: <http://www.akmars.org>
Alaska VHF-Up Group: <http://www.kl7uw.com/avg.htm>
Béthel Amateur Radio Klub: <http://www.al7yk.org/>
Yukon Amateur Radio Association:
<http://www.yara.ca/>

Links for Propagation

<http://www.harp.alaska.edu/>
QRP and Homebrew Links <http://www.AL7FS.us>
Solar Terrestrial Activity
<http://www.spaceweather.com>
<http://www.swpc.noaa.gov/>

ARRL <http://www.arrl.org/>

Propagation Report Recording 566-1819

Please let us know if there are other clubs pages or good starting points that should appear here.

Report dead links or bad info to editor@kl7aa.net

Regular HAM Gatherings:

Tuesday Lunch, 11:30 AM: Denny's on Denali behind Sears. Several old timers show for this and have lots of stories to share about amateur radio in Alaska.

Saturdays Breakfast, 7:30 AM: Here is a good way to get started on the weekend. Come and meet with some of the locals and have a great breakfast at **Peggy's Restaurant at the corner of Concrete Avenue and 5th Avenue across from Merrill Field.** Great Fun.

Who Do I Contact to Join AARC

Fred Erickson KL7FE
12531 Alpine Dr
Anchorage, AK 99516-3121
E-mail: [membership \(at\) kl7aa.net](mailto:membership(at)kl7aa.net)
Phone number: 345-2181
Annual Dues are \$12 (prorated as appropriate)
Additional Member in same household is \$6.
Full Time Student is no charge.
Ask about Life Memberships



MONTHLY EVENTS

1st Friday each month: AARC general meeting - 7:00 PM in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.27+ repeater.

1st Tuesday each month (except for holidays): VE License Exam 6:30 PM, at the Hope Cottage offices, 540 W International. Bring photo ID, copy of license (if any) and any certificates of completion. Contact: Jim Wiley, KL7CC 338-0662.

2nd Saturday each month: PARKA Meeting at 11:00 AM. Polar Amateur Radio Klub of Alaska. All amateurs welcome. Denny's on Denali Street in Anchorage. Talk in on 147.30+.

2nd Saturday each month (except for holidays): VE License Exams at 2:00 PM. at Hope Cottage 540 W. International. Be sure to bring photo ID, copy of license (if any) and any certificates of completion. Contact: Jim Wiley, KL7CC 338-0662.

3rd Saturday of each Quarter month: EARS general meeting at 3:00 PM. EARS meetings are held formally each Quarter during the first month: Jan, April, July, and October. Meetings are held informally each month at R1 North. Contact info - PO Box 6079, Elmendorf AFB 99506 or email Ron Keech, KL7YK for information. EARS: 552-2664 (recording); Talk in on 146.67-. Email: KL7AIR@arrl.net or KL7YK@arrl.net

3rd Tuesday each month: AARC Board meeting at 7:00 PM at Hope Cottage 540 W. International. All hams are invited and encouraged to attend.

4th Saturday of each month: Valley VE Testing at 7PM. sessions will be held at the Wasilla Red Cross at 7 pm on the fourth Saturday of each month unless it is a major holiday weekend. Wasilla Red Cross is in the Westside Mall, next to Speedy Glass...it's just a click up from AIH hardware.

The last Friday each month: MARA meeting at 7PM Fire Station 61, located two blocks up Lucille Drive, from the Parks hwy. Talk-in help for the meeting can be acquired on either the 146.640 or 146.850 repeaters. Further details can be found by contacting Tim Comfort, NL7SK, [NL7SK at arrl.net](mailto:NL7SK@arrl.net).

AARC web page & Email contact addresses:

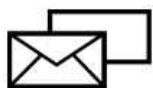
Homepage: <http://www.KL7AA.net/>
Webmaster: [webmaster at kl7aa.net](mailto:webmaster@kl7aa.net)
Membership: [membership at kl7aa.net](mailto:membership@kl7aa.net)
Newsletter: [editor at kl7aa.net](mailto:editor@kl7aa.net)

KL7AA HAMSHACK

The KL7AA station is available for training in HF operations. Learn from an experienced HF operator about propagation, voice and Morse code modes as well as best practices and legal operations. The station is fully integrated with a PC and soundcard to operate in many digital modes. There are weekly contests to participate in even if just helping Hams all over the world gain points and multipliers to win awards.

Your club station is quite capable and has great ears. Club operators have made many QSO's with all modes on all continents. Recent activities have seen SSTV QSO with New Zealand, hearing a Fallujah Iraq operator on PSK, a 15 meter contact to Peru during the CQ WW Phone contest. Common contacts are made with the lower 48 states and Caribbean, Canada, Japan, Korea, Taiwan, China, Russia and islands in the Pacific.

Take advantage of this unique benefit! Arrange a session by contacting the club trustee, Keith Clark, KL7MM to meet at the KL7AA station on Rowan Street.



KL7AA Mail Reflector

If you like to **stay in touch on KL7AA news** and other posts of local interest.

Step #1: First point your browser to:
<http://mailman.qth.net/mailman/listinfo/kl7aa>

Step #2: On the web page you will see a section titled "Subscribing to KL7AA". Enter your e-mail address in the "Your email address" entry box.

Step #3: Pick a password for your account and enter it in the box marked "Pick a password" and then enter the same password in the box marked "Reenter password to confirm". This password will be used to change your settings on the list such as digest mode, etc.

Step #4: If you would like the e-mails in daily digest form click yes on the line marked "Would you like to receive list mail batched in a daily digest?"

Step #5: Click on the "Subscribe" button below the information that you just entered.



Are you a member of ARRL?



ARRL is the American Radio Relay League. This is the national organization that advocates on behalf of amateur radio operators to

the FCC and the communications industry. **KL7AA** is an ARRL affiliated club with more than 50 years. Consider becoming a member of ARRL today.

For more information about the ARRL DXCC Program check out: <http://www.arrl.org/awards/dxcc/>

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News Letter Submissions, Information or corrections: Submissions must be received 2 weeks before meeting Email: editor@kl7aa.net
Mail: PO BOX 101987, Anchorage, AK 99510-1987

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News Letter Submissions, Information or corrections:
All articles from members and interested persons are very welcome. If you wish to submit any articles, jokes, cartoons, please have it typed or neatly handwritten. It can be submitted by mail, computer disk or E-mail to the newsletter editor at the address listed above. Submissions must be in the hands of the editor **no later than the 10 days prior** to the meeting or it may not be included. Email: editor@kl7aa.net

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Anchorage Amateur Radio Club Membership Application / Renewal

Membership Chairman: Fred Erickson, KL7FE
Email: membership@kl7aa.net
Phone Number: 345-2181

**All annual memberships
expire on
December 31st.**

Mail - In Membership Application

NAME: _____ CALL SIGN: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

PHONE: _____ HOME _____

E-MAIL: _____

_____ WORK _____

_____ MOBILE _____

Are you a member of ARRL?

YES _____

NO _____



DUES:

Dues for the calendar year (Jan through Dec) are as follows:

Individual Membership	\$12.00 (\$6.00 for each additional member at the same address)
Full Time Student	No Charge

Dues for **New** Members, joining the club for the first time will have their dues pro-rated from the month they first join to the end of the year at a rate of \$1 per month. For example, if you join in the beginning of August, your dues for the remainder of the year are \$5

Life Time Membership	\$250.00 (if over 65, inquire about reduced rates)
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I am enclosing payment for:

Subscription / Renewal for _____ year(s).

Total US Dollars Enclosed: \$ _____

What year did you get
your first Ham
License? _____

Please mail your payment and completed application to:



Anchorage Amateur Radio Club
c/o: Fred Erickson, KL7FE
12531 Alpine Drive
Anchorage, AK 99516-3121



THE MODULATION TIMES

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*ARRL Affiliated
Club for more
than 50 years*



KL7MD, KL7JFT, KL2NG, hang the TD-90 Dipole on the roof of Alaska Native Medical Center during the installation of the HF RMS in Anchorage on JAN 23 2010.

The hospital now has VHF/UHF and HF operations for emergency communications.

The ANMC Site host the WINLINK HF RMS (WL7CVG-5) for South Central Alaska.

Thanks to all who helped to complete this project!